Minnesota

Emergency Medical Services Communications Plan

Statewide Radio Board, Interoperable Communications Committee (SRB IOC)
EMS & Hospital Communications Sub-committee (EMSHC)

Approved by the Statewide Radio Board 1-26-2012

This document describes the Communications Standards & Contact information for Minnesota EMS Agencies and Regions to assist in planning for interoperability with EMS, hospitals and other public safety before, during and after migration to the statewide ARMER Radio system.

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Document Revision History

Date	Revision	Notes	Name
2-15-2011	Best Practice Final Draft	Approved by SRB 2-15-2-11	Kummer, Chris
11-19-2011	Change to plan Draft 1	Minor language changes to reflect plan	Kummer, Chris
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EMS & Hospital Communications Subcommittee (EMSH)

The OTC EMS, Hospital subcommittee was created in 2010 as a workgroup to assist and coordinate EMS, hospitals and public health across the State of Minnesota during migration to the ARMER radio system. As ARMER has grown beyond the Metro Region, it has been clear that EMS, hospitals and public health need direction, coordination and best practice guidance. This document is meant to specifically address EMS related issues and assist with planning for EMS Regions and agencies. Common EMS communications paths include the following:

- Ambulance to Hospital
- Ambulance to Dispatch
- Ambulance to Ambulance
- First Responder to Ambulance
- Air Ambulance to First Responder
- Air Ambulance to Hospital
- Ground or Air Ambulance to MRCC or Dispatch
- MRCC to Hospital

It is the committee's recommendation that all Minnesota EMS agencies migrate to the Minnesota ARMER System. The highest and most effective level of interoperability is achieved when users share the same radio system and have shared talk groups directly accessible to them in their radios. Common communications paths for hospitals and public health will be discussed in further best practices documents.

Participation in ARMER

Applicable Standard: State Standard 1.10.0 (Requesting & Configuring Participation)

The decision to participate in ARMER must be made in conjunction with county officials, local public safety, adjacent EMS agencies and hospitals. This must also include an evaluation of interoperability with other radio systems. For questions, please utilize the points of contact in this document.

EMSRB Communications Plan

A Statewide EMS Radio Communications Plan was first developed in Minnesota in 1975, revised in 1995 and again in 2007. The EMSRB Radio Communications plan was eliminated in 2011. However, the EMSRB has authority ensure EMS agencies comply with Statewide Radio Board plans, standards and policies.

Minnesota Hospital Related EMS Communications Planning

It is the recommendation of the workgroup that every hospital purchase and install an 800MHz radio approved for the ARMER system. It is important consider separate radios for the ED (for EMS) and hospital emergency preparedness. The highest and most effective level of interoperability is achieved when users share the same radio system and have shared talk groups directly accessible to them in their radios. Failure to do so may result in an inability to communicate by radio with pre-hospital EMS and other hospitals. Outside of the Metro Region there is currently no coordinated state plan for Minnesota Hospitals to migrate to ARMER, but that issue is being addressed by this workgroup.

Emergency Department Radio
It is recommended that each hospital establish one talkgroup specific for EMS to ED communications and that talkgroup be on a separate radio in the emergency department. The designated ARMER naming convention for hospitals is "EMH" for Emergency Medical Hospital. As an example, the Cambridge Medical Center talkgroup is EMHCB. Shared pre-hospital EMS talkgroups such as EMS-SMRCC or EMS-ETAC 1 -4 are not meant for hospital use and there is no reason to have them in the ED. Hospital-to-EMS or hospital-to-hospital communications should be on a designated talkgroup specific for that facility.

Hospital Emergency Preparedness
It is also recommended that each hospital purchase an 800MHz radio approved for the ARMER system for the hospital emergency preparedness program. Hospital Emergency Preparedness and ED radios should not be in the same location in order to minimize staff confusion. Hospital preparedness programs may need to develop a more comprehensive ARMER fleetmap for interoperability with local, regional and state partners such as EMS, RHPC and PHPC. Other forms of communication such as conventional radio must also be considered. A Hospital Communication Best Practice Guide is being developed by this workgroup.

Hospitals and VMED28 (HEAR, Statewide EMS)
Many hospitals are not planning to maintain VHF systems. However, The State of Minnesota will be narrow banding the state VHF infrastructure and it will remain available regardless of ARMER migration. Hospitals need to consider issues with bordering states and EMS agencies that will continue to use VHF. This workgroup recommends that hospitals maintain VHF systems as a way to communicate with diverse radio systems, or consider interoperable solutions between ARMER and conventional radio.

Minnesota EMS Specific Statewide Talkgroups & Channels

Minnesota EMS Users - EMS Specific Talkgroups & Channels	
Talkgroup/Channel	**Intended Use**
	ARMER 800 MHz - All EMS Users (Not for Hospital Use*)
EMS-SMRCC	Statewide MRCC Hailing (Monitored by WMRCC & EMRCC)
EMS-MRCXP1	Statewide MRCC Patching and Secondary use
EMS-MRCXP2	Statewide MRCC Patching and Secondary use
EMS-COORD	Statewide Ambulance Strike Team/EMS Taskforce Coordination (Command Level Only)
EMS-ETAC 1	Statewide EMS Tactical
EMS-ETAC 2	Statewide EMS Tactical
EMS-ETAC 3	Statewide EMS Tactical
EMS-ETAC 4	Statewide EMS Tactical
EMS-WMRCC	***Metro Region Only*** - West MRCC Hailing
EMS-EMRCC	***Metro Region Only*** - East MRCC Hailing
	VHF CONVENTIONAL
VMED28	VHF National EMS/Statewide EMS/HEAR
	Monitored ***in Metro Region only***

***ARMER EMS Talkgroups are meant for pre-hospital EMS and not for use by hospitals. Governance of these talkgroups is listed on the specific talkgroup standard.**

EMS Related Statewide Standards

Statewide Radio Standards are available on the Statewide Radio Board web site:

http://www.srb.state.mn.us/

Current applicable statewide EMS related standards:

- Statewide Radio Board ARMER Standard 3.36.0 (MRCC Talkgroups)
- Statewide Radio Board ARMER Standard 3.29.0 (EMS-COORD Talkgroup)
- Statewide Radio Board ARMER Standard 3.16.0 (ETAC Talkgroups)
- Statewide Radio Board ARMER Standard 3.5.0 (VHF ResourcesVMED28)

EMS Interoperability

Applicable Standards:

- State Standard 3.5.0 National/Statewide VHF Interoperability Resources
- State Standard 3.16.0 to 3.36.0 Interoperability Standards

The highest and most effective level of interoperability is achieved when users share the same radio system and have shared talk groups directly accessible to them in their radios. Shared Interoperable talkgroup resources exist in a variety of forms and may be called common, pool or tactical. It is imperative that EMS agencies plan effectively with mutual aid, law enforcement, fire and hospital partners. EMS agencies must be aware of local, regional and statewide interoperable radio resources and procedures.

Best practice is to use shared interoperable resources by progression. Beginning with internal and progressing to local/county first, then to regional and statewide resources last. Some progression may need to be skipped in the case of using an ETAC for EMS mutual aid or an STAC for air ambulance landing.

Planned Events

Planned events require consideration for the jurisdictions that will require communication. If shared interoperable resources are required, planners should start by considering local/county talkgroups first and progress to use regional and statewide talkgroups as necessary and appropriate given the agencies and the type of communication needed. This planning must be coordinated with the controlling dispatch center. Regional and state talkgroups need to be checked out appropriately with a dispatcher on the shared talkgroup resource status board available on ARMER dispatch consoles.

Emergency Incidents

Emergency response communications also requires pre-planning. Talkgroup progression should also be used and must be assigned by the controlling dispatcher based on availability. It is important to work closely with the dispatch center to ensure a shared resource is not already in use. Regional and state talkgroups need to be checked out appropriately with a dispatcher on the shared talkgroup resource status board available on ARMER dispatch consoles.

Based on the scope of the incident, the controlling dispatcher and the incident command structure must communicate effectively to ensure the most appropriate resource is assigned and matches the radio resource requirements of all responders. Dispatchers and incident commanders may choose to patch

resources as an incident expands and it becomes necessary to change talkgroups based on the larger response.

Aeromedical Interoperability

Applicable Standards:

- State Standard 1.13.0 Aircraft Radio Installation
- State Standard 3.16.2 Air Ambulance Emergency landing Zone Coordination

Responder and Aircraft have ARMER radios:
If the aircraft and the personnel on the scene coordinating the landing both have STAC talkgroups, they may use the STAC that has been assigned to them by the appropriate controlling Primary PSAP.

Responder or Aircraft that do NOT have ARMER radios:
If the aircraft does not have ARMER radio, but the personnel on the scene that will be coordinating the landing do, then the controlling Primary PSAP will assign the first available STAC and patch the responding air ambulance operating to MINSEF (VLAW31) if being landed by law enforcement personnel. If being landed by fire personnel, then SWFIRE (VFIRE23) is an option. If landing by EMS personnel EMS HEAR (VMED28) can be used. If both the responder and the aircraft have VHF radio, they will both use the appropriate VHF channel.

Aircraft to Hospital, Dispatch or MRCC Communication:
Whether an aircraft is equipped with ARMER or VHF radio, they may choose to contact hospitals in several ways:

- Aeromedical Dispatch Center relay via ARMER or VHF
- MRCC relay via the SMRCC talkgroup (Statewide) or VHF (VMED28) if in proximity to the Metro Region VHF infrastructure.
- Direct to hospitals via patch between ARMER & VHF coordinated by the Aeromedical or MRCC Dispatcher. (STAC or SMRCC Patched to VMED28)
- Direct to hospitals that have VHF radio (VMED28)

The appropriate communication pathway is relative to the available resource in the aircraft and the hospital. It may also be dependent on the effective communication of what is needed between the aeromedical crew and the dispatcher.

EMS Statewide Communications & Transport Relay Assistance

Most EMS agencies already have standard operating procedure to use when EMS units need assistance by radio or by phone when at an incident scene or when transporting patients to a hospital. Please be aware of the options available to you as you transition. EMS units can hail the EMS West Medical Resource Control Center (WMRCC) from anywhere in the State of Minnesota by radio or phone. This information is meant to assist agencies and field personnel to fill gaps that may exist as EMS agencies migrate to ARMER radio and not to circumvent already existing policy and procedure.

Field personnel should first use existing communication paths with hospitals or through dispatch centers if possible. However, WMRCC can be used as a resource when normal communication paths are not available. This may be when transporting to facilities that fall outside of the typical destinations or when

transporting into the Metro Region. This could be any facility in Minnesota or surrounding states. WMRCC has the general and emergency department phone numbers at hand to contact and relay information to any hospital facility necessary.

WMRCC is also available to assist EMS Field Commanders and RHPC's with notifications, coordination and patient tracking in MN*Trac* or by phone for large scale incidents.

Be aware that WMRCC is fully integrated into the Hennepin EMS Emergency Communication Center (ECC) located at Hennepin County Medical Center. WMRCC is staffed by Hennepin EMS ECC personnel. More information is available here: www.hcmcems.org/ems/commcenter.

West MRCC Contact Information

West MRCC Radio Communications (24X7)

- SMRCC (MRCC 800MHz ARMER Statewide Access) is the hailing talkgroup for units operating outside of the Metro Region. This is monitored 24X7 by WMRCC and EMRCC.
- MRCXP1 and MRCXP2 (800MHz ARMER Statewide Access) are secondary back-up and cross patching talkgroups also available statewide. Generally user will be directed here if necessary after hailing on SMRCC.
- VHF on VMED28 (Also known as National EMS, Statewide EMS & HEAR) Hailing on VHF is only available when in proximity to the Metro Region with the ability to hit a repeater in the metro VHF system. This is monitored 24X7 by WMRCC and EMRCC.
- WMRCC Talkgroup (MRCC 800MHz ARMER Regional Access) This talkgroup is not available statewide and is the hailing talkgroup used by Metro Region personnel. It can also be used by units when in proximity to the Metro Region. It is preferable that all users outside of the Metro Region use SMRCC.

West MRCC Phone Communications (24X7)

- 1-877-347-3145 (toll free)
- 612-347-2123

West MRCC Interactive Voice Response (IVR) System (24X7)

- This is an electronic system that a user can call by phone and be connected to Metro Region Hospitals. Push zero-zero (0-0) for a live WMRCC Dispatcher and star (*) for the hospital menu. The system calls the same hospital emergency department phone numbers that the live dispatcher calls. The WMRCC IVR phone number for units outside of the Metro Region is 612-766-4285
- Only Metro Region hospitals are available through the IVR

Radio Communications, Encryption & HIPAA Considerations

The Act allows the transmission of protected health information over the phone or radio for the purpose of emergency response, which includes patients being transported by ambulance. While it is prudent and responsible to minimize unnecessary patient identifying information over the radio, this information is usually necessary to complete a notification and give the receiving hospital the information it needs.

This workgroup does not recommend using encryption for any reason. All EMS communications is to remain in the clear. This avoids confusion and radio equipment incompatibility. In addition, statewide talkgroups used to communicate between EMS field units and hospitals are not encrypted. Agencies choosing to use encrypted equipment and talkgroups may not be able to effectively communicate with most users.

Patient Acuity Identification

The standard way of identifying patient acuity in EMS Incident Response Plan and in MNTrac across the state is with the color codes Red, Yellow and Green. These acuity indicators were originally based on S.T.A.R.T. Triage. They have evolved over the years and have a variety of definitions. This has caused confusion for field personnel, dispatchers and ED personnel.

Red-Yellow-Green colors are used in MNTrac and indicate the number of beds each hospital emergency department can handle in each category. MRCC uses these numbers in a major incident to coordinate patient disposition and in daily operations when relaying patient acuity from the field to the hospital. Based on experience and to make it intuitive and understood by field and hospital personnel alike, the following definitions are used today:

- **Red** = critical patient for stabilization/red room
- **Yellow** = patient needs a bed or stretcher
- **Green** = patient for triage only, ambulatory

Medical Control and Coordination

All EMS agencies must have radio communications capability for field medical personnel that permits the exchange of treatment information while the patient is at the scene of the emergency and while en-route to a medical care facility. The EMS agency must also have the capability to alert the medical facility prior to the patient's arrival, and there must also be means to allow coordination between medical facilities and other EMS agencies and disciplines.

Patient Information Relay to Hospitals

Field personnel based in the Metro Region should use existing policy and protocol for their agency, and use the existing WMRCC or EMRCC talkgroups.

Field personnel that operate outside of the Metro Region can hail WMRCC by radio on the SMRCC talk group. The MRCXP1 talk group can be used as a back-up, but only if the unit can't wait for traffic to clear from SMRCC talk group due to transport time or patient acuity. If the field user uses the phone, they should make contact to WMRCC directly.

The field unit must contact WMRCC at the earliest possible convenience. Care must be given to allow time for the relay of information. Do not wait for the last few minutes or miles of the transport.

Field personnel should make every attempt to follow the radio format and the specific sequence of information. This also helps to minimize workload and recognize the fact other units may be waiting. It is also very helpful to indicate a short ETA and/or RED/Critical patient in the initial radio hail to West MRCC. This will help the West MRCC dispatcher prioritize calls and minimize a wait in queue.

The following list is the typical information and sequence field users should provide when giving a patient report to West MRCC for medical control or routine information:

1. Agency & Unit ID
2. Declaration of medical control vs. routine patient information
3. Intended hospital destination
4. Age
5. Gender
6. Chief Complaint
7. Patient name (critical/red patients only and transfers)
8. Date of Birth (critical/red patients only and transfers)
9. Vital signs (critical/red patients only)
10. Response to treatment (critical/red patient only)
11. Other pertinent information, specifically for transfers
12. Patient Acuity (red/yellow/green)
13. Estimated Time of Arrival (ETA)

MRCC Radio Hailing Guidelines

Initial radio hail

Agency Name, Unit Number, West MRCC, Medical Control/Patient Information & Destination
(e.g. a Willmar EMS unit would state *"Willmar 7250 to West MRCC, I have patient information for Hennepin County Medical Center")*

Information to relay

"Agency Name, Unit Number, Patient Age, Patient Sex, Patient Chief Complaint, Triage Category (Red/Yellow/Green), ETA to Facility"

(e.g. a Willmar EMS unit would state *"Willmar 7250, 45 Year Old, Female, Femur Fracture, Yellow, 15 minute ETA to Fairview Southdale")*

- The West MRCC dispatcher will acknowledge the information and echo back the hospital destination that will be notified. This is an effort to ensure the correct hospital has been noted and acknowledged.
- There may be times when the dispatcher will ask the unit to remain on the radio talkgroup or channel while information is relayed in case the hospital has questions and to ensure the hospital is accepting the patient.

ARMER Communications and Interop Training

Applicable Standards:

- State Standard 1.11.1(system admin training), 1.11.2 (technical staff training), 1.11.3 (dispatcher training), 1.11.4(field user training), 1.11.5(non-system users training)

Training and training standards continue to evolve across the state. Metro Region EMS agencies have been training personnel since 2002 and can be a wealth of information and assistance. Training materials are widely available and can be tailored for individual agency application.

Regardless if your EMS agency will be changing radio systems, field and dispatch personnel need proper training on the ARMER system along with communications and interoperability basics as outlined in the SRB Standards and in accordance with regional standards and protocol.

Radio Equipment Guidance

Applicable Standards:

- State Standard 1.7.0 Subscriber Radio Equipment

Equipment authorized for use on the ARMER radio system is outlined on the ARMER web site: http://www.srb.state.mn.us/ . Also available on the web site is the state contract R-651 for communications vendors and equipment suppliers.

EMS ARMER Fleetmap Planning Guidance

Applicable Standards:

- State Standard 1.7.0 Subscriber Radio Standards
- State Standard 2.6.0 Fleetmap Standard
- State Standard 2.7.0 Use of Shared Talkgroups

Mobile and portable radio fleetmaps must be coordinated with the county and regional radio coordinators to ensure cooperative planning with mutual aid, law enforcement, fire and hospital partners. The following fleetmap is a best practice example of a typical mobile and portable radio fleetmap. The yellow highlighted talkgroups are the minimum EMS related talkgroups that should appear in every EMS ARMER radio in Minnesota.

	MAIN	HOSPITALS	INTEROP	NATIONAL	IC ZONE
	Zone A	Zone B	Zone C	Zone D*	Zone IC*
1	Dispatch	Local Hospital	Local Choice	8CAL90	STAC1
2	Local Choice	Local Hospital	Local Choice	8TAC91	STAC2
3	Local Choice	Local Hospital	Local Choice	8TAC92	STAC3
4	Local Choice	Local Hospital	Local Choice	8TAC93	STAC4
5	Local Choice	Local Hospital	Local Choice	8TAC94	LTAC1
6	Local Choice	Local Hospital	Local Choice	8CL90D	LTAC2
7	Local Choice	Local Hospital	Local Choice	8TC91D	LTAC3
8	Local Choice	Local Hospital	Local Choice	8TC92D	LTAC4
9	Local Choice	Regional Hospital	Regional	8TC93D	FTAC1
10	Local Choice	Regional Hospital	Regional	8TC94D	FTAC2
11	Local Choice	Regional Hospital	Regional	ASOA1	FTAC3
12	Local Choice	Regional Hospital	Regional	ASOA2	FTAC4
13	MRCXP2	Regional Hospital	Regional	PSOA1	ETAC1
14	MRCXP1	Regional Hospital	Regional	PSOA2	ETAC2
15	SMRCC**	Regional Hospital	Regional	FSOA1	ETAC3
16	Dispatch	SMRCC**	EMSCRD	FSOA2	ETAC4

*ARMER Standards 3.15 & 3.16 (includes addendum to 3.16 approved 1-24-2011)

**Standard 3.36.0 - Metro Region agencies should generally not use SMRCC unless they typically respond and transport outside of the Metro Region and will not be able to access the regional WMRCC and EMRCC talkgroups. The typical Metro Region EMS agency should substituted WMRCC and EMRCC as appropriate in Zone A. Staff training on proper use must be considered.

Standard Minnesota VHF Interop Resources*

	Standard Name	Short Name	Mobile TX Freq	CTCSS or NAC	Mobile RX Freq	Original Name or Use
1	VCALL10	VCAL10	155.7525	156.7	155.7525	National Public Safety Calling
2	VTAC11	VTAC11	151.1375	156.7	151.1375	National Public Safety Tactical
3	VTAC12	VTAC12	154.4525	156.7	154.4525	National Public Safety Tactical
4	VTAC13	VTAC13	158.7375	156.7	158.7375	National Public Safety Tactical
5	VTAC14	VTAC14	159.4725	156.7	159.4725	National Public Safety Tactical
6	MNCOMM	MNCOMM	155.3700	156.7	155.3700	MIMS
7	VFIRE23	VFIR23	154.2950	156.7	154.2950	SWFIREMA
8	MNFIRG2	MNFG2	154.0100	156.7	154.0100	SW Fire Tactical
9	MNFIRG3	MNFG3	153.8300	156.7	153.8300	SW Fire Tactical
10	DNRTAC1	DNRT1	151.4750	CSQ	151.4750	MN DNR
11	VLAW31	VLAW31	155.4750	156.7	155.4750	MINSEF
12	VMED28	VMED28	155.3400	156.7**	155.3400	EMS HEAR
13	IR2	IR2	165.9625	167.9	170.4125	Temp Incident Tactical
14	VTAC14R	TAC14R	154.6875	156.7	159.4725	STR Temporary Repeater
15	NGRPTR	NGRPTR	Restricted	Restricted	Restricted	National Guard Temporary Repeater
16	LE2	LE2	Restricted	Restricted	Restricted	Federal LE Interop

***SRB Statewide VHF Interoperable Frequency Steering Committee 12-2-2010**

****This CTCSS Tone is the National Standard emergency tone found in the National Interoperability Field Operations Guide (NIFOG) and recommended by NPSTC. The Minnesota SRB Statewide VHF Interoperability Steering Committee has established this tone in the Minnesota VHF Interop Plan, recognizing that other tones are currently used with VMED28 across the State of Minnesota. The plan recommends that Minnesota agencies using VHF migrate to the national standard CTCSS tone when appropriate, which may be when narrowbanding. Meanwhile, it may be advisable to work through any gaps created by changing the tone in your area.**

VMED28 (National EMS, HEAR, Statewide EMS) State Planning

The workgroup recommends that EMS and hospital users maintain VHF radio capability and/or interoperability if there is a need for continued interoperability with other states or Minnesota VHF users.

Excerpt from the SRB MN VHF Interoperable Frequency Plan – Dated 12-2-2010:
The Statewide VHF Interoperable Frequency Steering Committee established the final revision of the VHF plan on 12-2-2010. This plan describes the primary channel for interagency EMS communications in the state as 155.340MHz, commonly referred to as EMS HEAR, Statewide EMS and National EMS. The national naming convention for this channel is VMED28. Under FCC rules, "this frequency may be designated by common consent as an intersystem mutual assistance frequency under an area-wide medical communications plan" and was developed as a statewide mutual aid channel under the Minnesota EMSRB Radio Communications Plan. The use of this channel is widespread in Minnesota and has been authorized for use by local, regional, and state authorities for fixed, mobile, and portable radios.

Permission to utilize this channel outside the EMS discipline or hospitals, from the SRB and previous authorities, has been limited. The current standard operational mode for this channel is wideband analog but this channel is subject to the FCC mandated narrowbanding deadline.

In the EMSRB plan, this channel is specified for use with a CTCSS code (210.7) different from the national standard (156.7). This would limit the use of this channel for statewide interoperability with other users from adjacent states and regions that currently utilize or plan to migrate to the national standard CTCSS code.

An additional statewide EMS tactical channel, 150.7750 MHz, appears in the EMSRB Radio Communications Plan although the channel does not appear to be widely used based on a search of the FCC licenses in the state.

VHF Narrowbanding (Excerpted from the SRB MN VHF Interoperable Frequency Plan)
The Department of Public Safety (DPS) in conjunction with the SRB has recommended that, in order to preserve interoperability, agencies continue to maintain wideband capability on these channels in mobile and portable radios until the narrowbanding deadline of January 1, 2013. This could be accomplished by programming or updating the four current statewide interoperability channels in existing radio modes and zones using wideband names as shown in Table and adding the Statewide VHF interoperability zone with narrowband channels into their radios prior to the 60 day transition period.

DPS proposes that users should proceed with reprogramming base stations on these four statewide channels beginning on October 1, 2012. Reprogramming of mobile and portable radios could begin before that date if users retain wideband capabilities as well. DPS also urges all users to complete narrowbanding these channels in all their radios no later than November 30, 2012. All wideband operations on these channels must cease as of January 1, 2013.

During this 60 day narrowbanding transition period, significant difficulties communicating on these four primary statewide mutual aid channels may occur if users at an incident are attempting to communicate from a narrowband channel to a wideband channel and vice versa. Even though the operating frequency is unchanged, the substantial differences in operating bandwidth between these modes can cause low or muted audio and/or significant distortion of radio communications.

Bordering States Considerations

VHF frequencies such as VMED28 are widely used by EMS in the adjacent states of North Dakota, South Dakota, Wisconsin, and Iowa. Each of these states interoperability plans includes some provisions for use of the national VCALL and VTAC channels and all of the current primary VHF interoperability

channels used in Minnesota. The one exception is MIMS (155.370MHz) which is not widely licensed or used in South Dakota.

EMS agencies that may require interoperability with hospitals or EMS across state lines need to carefully consider 800MHz and conventional interoperability.

Grants Guidance

All ARMER grant information is located on the Emergency Communications Networks web site: https://dps.mn.gov/divisions/ecn/grants/Pages/default.aspx

The following grants are applicable to EMS for ARMER and VHF equipment. Agencies should contact their RAC for more information.

- IECGP Grants, Interoperable Emergency Communication Grant Program
- SHSP Grants, State Homeland Security Program grants
- PSIC Grants, Public Safety Interoperable Communications grant program
- Other, there are other available grant dollars

EMS Points of Contact for General Assistance

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Minnesota Emergency Communication Networks Contacts

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Regional Radio Board and Advisory Committee Contacts

EMS agencies across Minnesota must be involved with their respective radio regional governance structure. There are 7 radio regions that do not align with EMS regions. Be aware of which regions may affect your primary response area.

Contacts for the Regional Radio Boards (RRB) and Regional Advisory Committees (RAC) can be found on the DECN web site here: https://dps.mn.gov/entity/srb/regions/Pages/default.aspx